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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/087,769

03/05/2002

Ling-Zhong Liu

12658-US

7454

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7590

02/23/2005

EXAMINER

OPIE, GEORGE L

MARKS & CLERK

P.O. BOX 957

STATION B

OTTAWA, ON K1P 5S7

CANADA

ART UNIT

PAPER NUMBER

2126

DATE MAILED: 02/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/087,769	Liu et al.	
	Examiner	Art Unit	
	George L. Opie	2151	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- 1) ☒ Responsive to communication(s) filed on 5 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ☐ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ☐ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) ☐ is/are objected to.
- 8) ☐ Claim(s) ☐ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ☐ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on ☐ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some * c) ☐ None of the CERTIFIED copies of the priority documents have been:
1. ☐ received.
 2. ☐ received in Application No. (Series Code / Serial Number) ☐.
 3. ☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

- | | |
|---|---|
| 14) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 17) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). <input type="checkbox"/> |
| 15) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 18) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 16) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) submitted <u>6 June 2002</u> . | 19) <input checked="" type="checkbox"/> Other: Text Docs for USP6,694,471 USP6,298,378 USP5,363,504 |

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DETAILED ACTION

1. Request for copy of Applicant's response on floppy disk:
Please help expedite the prosecution of this application by including, along with your amendment response in paper form, an electronic file copy in WordPerfect, Microsoft Word, or in ASCII text format on a 3½ inch IBM format floppy disk. Please include all pending claims along with your responsive remarks. Only the paper copy will be entered -- your floppy disk file will be considered a duplicate copy. Signatures are not required on the disk copy. The floppy disk copy is not mandatory, however, it will help expedite the processing of your application. Your cooperation is appreciated.

2. The U.S. Patents used in the art rejections below have been provided as text documents which correspond to the U.S. Patents. The relevant portions of the text documents are cited according to page and line numbers in the art rejections below. For the convenience of Applicant, the cited sections are highlighted in the *text documents*.

3. Claim Rejections - 35 U.S.C. § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-6, 8-9, 11, 13-15 and 17-19 are rejected under 35 USC § 103(a) as being unpatentable over the Admitted Prior Art (APA) from the background of the instant application in view of Angal et al. (U.S. Patent 6,298,378).

As to claim 1, the APA teaches a system for event notification and distribution between applications in a distributed computer network (current event notification systems, p1 ln19-25) comprising:

a management function for managing location and event information for distribution between respective applications (EP will carry two separate lists: one for local Ecs, and one for remote Ecs, p2 ln1-6).

The APA, however, does not explicitly disclose the limitation of a naming service to enable connection of applications.

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Angal teaches a management function for managing location and event information for distribution between respective applications (Event Distribution Registry ... contains filters and address information, p7 28-40) and a naming service to enable respective applications to connect together (Name Server 106 that provides a database comprising names and addresses for all entities installed on the network, p4 29-47).

It would have been obvious to combine Angal's teachings with the APA because the naming service and distribution registry would function as robust management mechanisms to facilitate an improved efficacy in the control/configuration of event handling systems.

As to claim 2, the APA teaches the respective applications are executed on nodes connected in the network (applications , which execute on the various computer systems ... send events to applications also executing on the various computer systems, p1 19-25).

As to claim 3, the APA (p1 19-25) teaches the applications executed on said nodes represent event consumers (EC) and event producers (EP).

As to claim 4, the APA teaches the event consumers and said event producers are either local or remote (local ECs, and . . . remote ECs, p2 1-6).

As to claim 5, the APA teaches "event notification systems ... will carry two separate lists: one for local ECs and one for remote ECs", p1 ln25 – p2 ln14, which corresponds to the management function ensures automatic coordination between events on local and remote event consumers and event producers.

As to claim 6, Angal teaches an event manager that interfaces between event producers and event consumers (sources 502 ... directed by EDR 516 ... associate to subscribers, p6 4-23) to track location information respecting event producers and event consumers (EDR contains filters and address information necessary to link the event components, p7 28-40).

As to claim 8, Angal teaches "configuring the communication ... to have the format event-report-response", p7 9-27 which reads-on the event manager that interfaces between event producers and event consumers to enhance event notification delivery.

As to claim 9, Angal teaches "name server 106 that provides a database comprising names and addresses of all entities installed in the network", p4 29-47, and from this, one skilled in the art would readily recognize that an event manager would have both a local name and a shared global name, as each

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entity/manager is identifiable on its resident system by simply using its local handle, rather than the full network identifier held on the name server.

As to claim 11, the APA teaches each event producer maintains a list of all event consumers wishing to receive an event notification (EP must know which EC to send to ... lists: one for local ECs and one for remote ECs), pp1-2).

As to claim 13, note the rejection of claim 1 above. Claim 13 is equivalent to claim 1, with the exception that claim 13 is a method claim and claim 1 is an apparatus claim.

As to claim 14, see the rejection of claim 2 supra.

As to claim 15, Angal teaches the "management software is installed and operated on each of the servers 1102 in the network", p8 44-57, which corresponds to an event manager is created at each node, registers with said naming service and obtains a local name and a global name.

As to claim 17, see the discussion of claim 1 supra.

As to claim 18, Angal teaches the naming service is a database containing application names and location (Name Server 106 that provides a database comprising names and addresses for all entities installed on the network, p4 29-47).

As to claim 19, see the rejection of claim 2 supra.

5. Claim 12 is rejected under 35 U.S.C. § 103(a) as being unpatentable over the APA and Angal as applied to claim 3, and further in view of Gleeson (U.S. Patent 5,363,503).

As to claim 12, Gleeson teaches a "Flexible Fault Tolerant System", p12 27-30 that employs backup redundancy so the event producers and the event consumers "primary task (21 or 31) initiates the required delivery to the backups", p6 23-35 have redundant versions to provide event delivery to stand by applications "external event occurs ... sent to the respective backup task for storage in ... its respective CPU", p13 27-40 when the network does not permit event delivery to primary event producers and event consumers "tasks 31 and 41 ... correctly repeated ... by backup tasks 32 and 42 which communicate with each other via external communication network 45", p8 4-13. It would have been obvious to combine Gleeson's teachings with the APA as modified because the backups exploit fault-tolerance, thereby improving reliability of the processing/notification system.

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6. Claims 7, 10 and 16 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the APA and Angal as applied to claims 5 and 13 above, and further in view of Sharp (U.S. Patent 6,694,471).

As to claims 7 and 10, Sharp teaches "determining that the first message has not been acknowledged and periodically retransmitting the first message from the source to the destination", p2 15-24 which corresponds to the limitations of providing redundant event operations by an event manager that is configured to send an event periodically and until an acknowledgement is received from an event consumer. It would have been obvious to combine Sharp's teachings with the APA as modified because the periodic retransmissions would supply consumers with increased opportunity to receive the given events.

As to claim 16, note the rejection of claim 10 above. Claim 16 is the same as claim 10, except claim 16 is a method claim and claim 10 is an apparatus claim.

7. Contact Information:

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system.

Status information for published applications may be obtained from either Private-PAIR or Public-PAIR.

Status information for unpublished applications is available through Private-PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

All responses sent by U.S. Mail should be mailed to:

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Hand carried responses should be delivered to the *Customer Service Window* (Randolph Building, 401 Dulany Street, Alexandria, Virginia 22314) and, if submitting an electronic copy on floppy or CD, to expedite its processing, please notify the below identified examiner prior to delivery, thereby enabling Applicant to "handoff" the electronic copy directly to the examiner.

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The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

All OFFICIAL faxes will be handled and entered by the docketing personnel. The date of entry will correspond to the actual FAX reception date unless that date is a Saturday, Sunday, or a Federal Holiday within the District of Columbia, in which case the official date of receipt will be the next business day. The application file will be promptly forwarded to the Examiner unless the application file must be sent to another area of the Office, e.g., Finance Division for fee charging, etc.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Opie at (571) 272-3766 or via e-mail at George.Opie@uspto.gov. Internet e-mail should not be used where sensitive data will be exchanged or where there exists a possibility that sensitive data could be identified unless there is an express waiver of the confidentiality requirements under 35 U.S.C. 122 by the Applicant. Sensitive data includes confidential information related to patent applications.



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